

## ARTICLE

# INVESTIGATING THE KNOWLEDGE AND ATTITUDE OF HIGH SCHOOL STUDENTS TO AIDS DISEASE IN ZABOL CITY IN 2014

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## ABSTRACT

AIDS disease is the most serious health problem and deadliest infectious disease of the current century. The emerging of disease and insufficient knowledge of it easily expose the adolescents at risk. This study aimed to determine the knowledge and attitude of high school students to AIDS in Zabol city. In this cross-sectional study, 350 male and female high school students of Zabol city who were studying in the high school in 2014 were investigated. The questionnaire containing basic questions, knowledge and attitude about AIDS transmission ways to collect information. The majority of students (48.5%) had good knowledge and there is a significant relationship between their knowledge in terms of demographic variables and age, gender, field and grade of education and parental education. The rate of attitude towards the AIDS was assessed as follows: Weak in 114 people (32.6%), normal in 204 people (58.3%) and good in 32 people (3.1%). This study showed that despite the suitability of knowledge of students about AIDS and dominance of medium attitude in them, there is a weak attitude in 32.6% of students. Therefore, it is recommended to develop strategies in order to reduce the risk of AIDS among adolescents in secondary schools.

## INTRODUCTION

AIDS is adventitious immune deficiency syndrome and it is a description of disorders caused by defects in the function of the human immune system that occurs by infection with human immune deficiency virus (HIV). This disease can range from mild viremia to severe safety impairment with life-threatening opportunistic infections and even malignancies associated with AIDS [1]. The transfer of HIV takes place from various ways, such as sexual contact, condensed coagulation factors, contaminated blood components and multiple non-sterile injections [2].

It is estimated that about 40 million people (36-44.5) infected with HIV are living in the world. About 5 million people (4-6) were infected with this disease every year and about 3 (2.8-3.5) million people lose their life. The statistics showed that more than 60% of people with AIDS are between the ages of 15-24 years [3]. The study of Center for Disease Control [CDC] on the risky behaviors of the youth showed that 50% of the American high school students have had sexual relations and on the other hand 50% of new cases of HIV infection occur in this age where every one minute 5 people and every 14 seconds a person between the age of 15-24 years is infected with the virus worldwide [4]. HIV prevalence in the general population is low and it is totally 1% in Iran [5]. According to the statistics collected by the University of Medical Sciences and Health Services as of March 2012, a total of 24 thousand and 290 people with HIV have been detected in the country of whom 90.8% are men and 9.2% are women [1]. The results of various studies showed that in the combat program with AIDS, training and subsequently correction of wrong attitudes in this field and promotion of correct hygienic behavior are the only ways to prevent the disease.

The first step of behavior change in line with a subject is having enough knowledge about that subject. Given that a large percentage of adolescents and young people attend in the schools, training of AIDS prevention in schools is of particular importance. So, the assessment of attitude and knowledge in the behavior of high-risks groups in all societies frequently becomes necessary.

The objective of this study was to evaluate the knowledge rate of Zabol students about AIDS. It assesses their beliefs and attitudes towards the subject and compares them with each other. In fact, this study tries to optimize the health of society.

## MATERIALS AND METHODS

A questionnaire was used to collect data that is included demographic data, 25 questions with three-options of knowledge (Yes, No, I do not know) and also 11 questions with three-options of attitude (Agree, No idea, Disagree) about AIDS disease and its transmission ways. The validity of the questionnaire is determined based on the content validity method and reception of teachers' comments. Also, its reliability

### KEY WORDS

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was confirmed as 91% using Cronbach's alpha coefficient. In this study, the collected data are analyzed with SPSS 21 software and they are presented in the form of descriptive statistics (frequency, mean, standard deviation). The statistical tests such as t-test and ANOVA are used to analyze data and  $p < 0.05$  is considered as significance level. To classify the level of knowledge-attitude, the total scores are divided into three parts. The scores are considered as follows: The score less than 33% is weak. The score between 33-66% is medium. The score higher than 66% is good. Finally, the results are shown in the table.

## RESULTS

In total, 350 students are evaluated in this study of whom 50% were female and 50% were male and most of them (33.1%) were 19 years old. Many of these students (28.6%) were studied in the fourth grade of high school and 39.1% of them were enrolled in experimental fields and all of them were residents of Zabul city. Most of their parental education level were diploma and elementary school with 37.7% and 43.7%, respectively and most of their parental job were self-employed and homemaker with 38.6% and 90.6%, respectively.

In total, the knowledge of most of the students (48.5%) was good. The knowledge rate of (40.6%) students was moderate and knowledge rate (10.9%) of students was weak. The knowledge of the students in terms of demographic variables shows a significant difference between the average knowledge of the students in terms of age, gender, field and grade of education and parental education. So that 19 years old students show better knowledge than the other ages and the knowledge of girls was more than the boys. The students of third and fourth grade show a higher knowledge than the other grades and the students of experimental field had the higher average of knowledge. Also, the students with highly educated parents were obtained higher knowledge. The attitude rate of students towards AIDS was evaluated as follows:

- 114 (32.6%) people had weak attitude.
- 204 (58.3%) people had medium attitude.
- 32 (9.1%) people had good attitude.

The mean comparison test of attitude score in terms of demographic variables showed a significant difference between the attitudes of students in terms of age, gender, field and the grade of education. The mean of attitude rate in girls was higher than the boys. The 18 and 19 years old students showed the highest average of attitude. The average of attitude in the fourth grade was obtained more than the other grades. The students of experimental field had the highest rate of attitude.

**Table 1:** Comparing the mean scores of knowledge and attitude and demographic variables in students participating in study

The significance level	Average Rating attitude	The significance level	Average Rating attitude	Average Rating awareness	Demographic
p-value<0/05	3/91	p-value<0/05	11/67	14	Age (years)
	4/09		13/67	15	
	4/47		14/61	16	
	4/50		14/81	17	
	4/67		15/68	18	
	5/16		16/73	19	
p-value<0/05	4/20	p-value<0/05	14/29	Man	Gender
	5/00		16/27	Female	
p-value<0/05	4/10	p-value<0/05	14/73	First	Grade
	4/36		13/35	Second	
	4/70		16/17	Third	
	5/27		16/76	Fourth	
p-value<0/05	4/36	p-value<0/05	14/73	General	Field of study
	5/25		17/26	Experimental	
	4/06		13/47	human	

Investigating the sources of information about HIV/AIDS revealed that television- radio and teachers and relevant courses were the highest resources of information for the students with 48.5% and 16.4%, respectively. Internet, friends and relatives, newspapers and magazines were allocated 14.9%, 11.4% and 8.6% of the information resources, respectively.

**Table 2:** Absolute and relative frequency distribution sources all high school students in the city of Zabul

Intelligence sources	Number	Percent
Radio-TV	170	48/5
Gazette-Journal	30	8/6
Courses for teachers	58	16/6
Internet	52	14/9
Family and friends	40	11/4
Total	350	100

## CONCLUSION

Among the students participating in this study, the rate of knowledge about the AIDS disease in 38 people (10.9%), 142 people (40.6%) and 170 people (48.5%) were evaluated as weak, medium and good, respectively. The rate of attitude towards the AIDS disease in 114 people (32.16%), 204 people (58.3%) and 32 people (9.1%) was weak, medium and good, respectively. In the Arabi. M and colleagues study on the female students in secondary schools in relation to AIDS, knowledge of transmission ways and overall knowledge of the patient were in the moderate level [5]. In this study, the findings show the good knowledge of students about AIDS disease. Also, In the Arabi. M and colleagues study, the mean scores of students' attitude towards AIDS was high and the majority of them had good attitude to the disease [5]. While in this study, the students' attitudes towards AIDS was reported as normal.

In Mazlumi and colleagues study on the high school students in Yazd province, the knowledge of the majority of the students (35.2%) was good [6]. Similar results were obtained in this study. In Mazlumi and colleagues study, Most students (36.3%) had positive attitude towards AIDS while according to the ratio of 32.4%, the negative attitude was also common among them [6]. However, in this study, the students' attitude towards the AIDS was normal. In this study, according to the ratio of 32.6%, negative attitude was also common among students. In Momeni and colleagues study on the pre-university students in Yasuj city regarding AIDS, the knowledge of 77.5%, 16.3% and 1.2% of people were good, excellent and weak, respectively [7]. The knowledge of students in Yasuj was in a favorable level compared to the current study. This could be due to the regional differences. In addition, the activities of health centers of education ministry in this region and the limitations created in the schools in Zabol due to the special faith and cultural conditions could be effective on the low level of the students' knowledge.

The knowledge and attitude of students in terms of demographic variables showed a significant difference between the average knowledge and attitudes of students in terms of age, educational grade and educational year. The mean scores of knowledge and attitude of students were higher with the increase of age and years of education. So that, there was a significant difference between the mean score of knowledge and attitude in terms of age and the year of education. This could indicate that students at higher levels of education and at older ages were more exposed to the information of different resources regarding AIDS disease or seek more information on this field and try more to self-learning and acquire positive attitude. This is in consistent with the study conducted by Dr. Arabi, Dr. Mazlumi and Dr. Imam Hadi [3,5,6]. Another finding of this study was that girl students had significantly higher mean score of knowledge and attitude compared to the boys. In other words, the knowledge and attitude of girls about AIDS and HIV patients were better than the boys. The study conducted by Ramazankhani, Rostami and Shokrollah confirmed this result [8].

According to the results of this study, there was a significant relationship between knowledge and attitude with experimental field that could arising from the different content of this field from the other fields of study and its close relationship with diseases. Also, the students with highly educated parents received higher knowledge. This may be due to the positive effect of scientific level of family on the knowledge of the children. Based on these findings, radio and television were the main source of information of students about AIDS disease. The study conducted by Tavusi et al [9] and Mazlumi et al [6] emphasized the role of social communication media especially radio and television to obtain information.

In the Zhao study [10], reception of information from school, family and peers about AIDS disease was less than social communication media. The results of several studies in Singapore and Yazd [11,12] are consistent with this finding. A significant proportion of students (14.9%) referred to the internet as one of the resources of information. This not only endorsed the role of indirect training and remote learning based on the computer, but also can be one of the significant methods of educational policymakers to promote the public knowledge level especially of young people in the schools. Since the social communication media especially television and radio are the most dominant source of information by students, they can be the best way to enhance students' knowledge. It should be said that battle mobilization against spread of AIDS is a basic necessity and schools must be one of the main centers in the reduction strategies of AIDS. Training of students regarding all aspects should attract the serious attention from the educational and governmental policymakers as an integral part of education in all schools of the country. Of course, the implementation of this requires the collective will of educational planners of parents and teachers community and (NGO) of country and voluntary and informed participation of parents.

### CONFLICT OF INTEREST

Authors declare no conflict of interest.

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